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## THE POST

**College:** Engineering, Mathematics and Physical Sciences <http://emps.exeter.ac.uk/>

**Post:** Associate Research Fellow

**Reference No:** P43292

**Grade:** E

**HERA:** ARF

The above full-time post is available immediately for a duration of 36 months in the College of Engineering, Mathematics and Physical Sciences.

### **Job Description**

Research on high latitude permafrost modelling, focussing on permafrost global effects within the Earth system during the 21<sup>st</sup> century.

### **Main purpose of the job:**

With the EU/FP7 PAGE21 project on, the objectives of the Associate Research Fellow (ARF) position is to understand and quantify the vulnerability of permafrost environments to a changing global climate, and to investigate the feedback mechanisms associated with increasing greenhouse gas emissions from permafrost zones. Under the supervision of Professor Pierre Friedlingstein and in collaboration with the MetOffice, the successful applicant will develop the JULES dynamic global vegetation model in order to better represent the dynamic of permafrost. He/she will evaluate the permafrost model in collaboration with project partners and use it as part of the MetOffice Earth system model to assess the future behavior of permafrost under different scenarios of 21<sup>st</sup> century climate change. The University of Exeter being one of the PAGE21 spokespersons, it is expected for the ARF to contribute to the science communication of the project.

### **Main duties and accountabilities:**

1. To undertake research as appropriate to the field of study including:
  - Writing up research work for publication;
  - Making presentations at national and international conferences and similar events;
  - Dealing with problems which may affect the achievement of research objectives and deadlines;
  - Analysing and interpreting the results of own research and generating original ideas based on outcomes;
  - Using new research techniques and methods;
  - Using initiative and creativity to identify areas for research, developing new research methods and extending the research portfolio;
  - Using creativity to analyse and interpret research data and draw conclusions on the outcomes.
2. To potentially contribute to teaching and to be involved in the assessment of student knowledge including assisting in the supervision of student projects and in the development of student research skills.
3. To work in collaboration with colleagues and project partners as appropriate to the field of study including:
  - Contributing to collaborative decision making within the research group;

- Contributing to the production of collaborative research reports and publications.
  - Preparing papers and presenting information on research progress and outcomes to bodies supervising research, e.g. steering groups.
4. To communicate information in the context of the PAGE21 project, orally, in writing and electronically.
  5. To contribute to the planning of research projects.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

### **Person Specification**

<b>Competency</b>	<b>Essential</b>	<b>Desirable</b>
Attainments/Qualifications	PhD or equivalent in a related field of study.	
Skills and Understanding	Sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes.  Expertise in programming languages and software, use of large numerical codes.	Expertise on dynamic global vegetation models and/or climate models. Knowledge on high latitude ecosystems.
Prior Experience	Evidence of research activity and published research in the field	Experience of science communication to non-specialists
Behavioural Characteristics	Excellent written and verbal communication skills.  Able to communicate material of a specialist or highly technical nature.  Able to liaise with colleagues and students.  Able to build contacts and participate in internal and external networks for the exchange of information and collaboration.  Actively participate as a member of a research team	
Circumstances		

### **Informal Enquiries**

Before submitting an application you may wish to discuss the post further by contacting Professor Pierre Friedlingstein e-mail [p.friedlingstein@exeter.ac.uk](mailto:p.friedlingstein@exeter.ac.uk).